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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,497	07/19/2001	John W. Evans	290397.0007	9692
21832	7590	10/03/2005	EXAMINER	
MCCARTER & ENGLISH LLP CITYPLACE I 185 ASYLUM STREET HARTFORD, CT 06103			KHAN, AMINA S	
			ART UNIT	PAPER NUMBER
			1751	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/910,497

Applicant(s)

EVANS ET AL.

Examiner

Amina Khan

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-13 and 27-50 is/are pending in the application.
- 4a) Of the above claim(s) 30-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-13, 27-29 and 40-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/7/01, 04/23/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-4,6-13,27-29 and 40-50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 discloses a non-aqueous heat transfer fluid comprising a diol mixture and corrosion inhibitors with an amendment to the claim stating "fluid having a freezing point at atmospheric pressure of less than minus 10°C and a boiling point at atmospheric pressure of greater than 150°C." There is no basis in the specification of the instant application for the inclusion of the boiling point (bp) and freezing point (fp) ranges. The specification of the instant application does disclose the individual boiling and freezing points for neat PG (bp 187.2°C, fp -60°C), neat EG (bp 197.3°C, fp -13.5°C) and a 30/70 PG/EG mixture (bp 190.5°C, fp -37.2°C) (page 15, line 7 to page 17, line 10). How the applicant arrived at the claimed freezing and boiling point ranges is not disclosed in the specification of the instant application and is therefore considered new matter.

Art Unit: 1751

Claims 1, 27 and 43 disclose a non-aqueous heat transfer fluid wherein ethylene glycol comprises more than 60 percent by weight of the total weight of the diol in the heat transfer fluid. There is no basis in the specification of the instant application for the inclusion of the range of more than 60 percent. The specification of the instant application does disclose that the fluid may contain ethylene glycol in any amount ranging between 0-70 percent by weight of the total ethylene glycol and propylene glycol in the fluid (page 14, line 22 to page 15, line 1). The range claimed in the specification of the instant application between 0-70 percent does not entirely encompass the range greater than 60 percent (which also includes greater than 70 to 100 percent) and therefore is considered new matter.

Claim 43 discloses a non-aqueous heat transfer fluid wherein propylene glycol comprises less than 40 percent by weight of the total weight of the ethylene glycol and the propylene glycol in the fluid. There is no basis in the specification of the instant application for the inclusion of the range of less than 40 percent and therefore is considered new matter.

Claims 2-4, 6-13, 28,29, 40-42 and 44-50 are rejected because they are dependent on claims 1, 27 or 43.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1751

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-12, 27-29, 40-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Evans (International application #WO 96/37570).

The prior art of Evans teaches non-aqueous heat transfer fluids comprising propylene glycol (at least 40%), ethylene glycol (page 16, lines 4-11) and corrosion inhibitors that do not require water for the additives to enter into or remain in solution (page 17, lines 1-3) as claimed in claims 1,3 and 4. Evans further teaches that the additives each be present in a concentration range from 0.3% to 0.5% by weight (page 18, lines 2-4) and include sodium molybdate, tolyltriazole, and sodium nitrate (page 17, lines 9,12 and 16) as claimed in claims 2 and 6-12. Evans further teaches a coolant formulation comprising propylene glycol as the sole heat transfer base at >99% by weight (page 21, line 30) but also teaches that ethylene glycol may be used in combination with propylene glycol provided at least 40% propylene glycol is present (page 16, lines 4-11) allowing for the inclusion of up to about 60% ethylene glycol. Evans further teaches adding at least 40% propylene glycol to ethylene glycol to reduce toxicity (page 16, lines 4-11; page 5, line 15 to page 6, line 13) as claimed in claims 27-29 and 40-50.

Accordingly, the broad teachings of Evans anticipate the material limitations of the instant claims.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1,3,4,27-29,40,42 and 43 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. US 2002/0171063 A1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of US 2002/0171063 A1 encompass the material limitations of the instant claims.

Art Unit: 1751

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1,3,4,27-29,40,42 and 43 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. US 2002/0020828 A1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of US 2002/0020828 A1 encompass the material limitations of the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 1-4,6-13,27-29 and 40-50 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. US 2002/0020828 A1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of US 2002/0020828 A1 encompass the material limitations of the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amina Khan whose telephone number is


Art Unit: 1751

(571) 272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Amina Khan, PhD  
Patent Examiner  
September 28, 2005



NICHOLUS OGDEN  
PRIMARY EXAMINER